

to cleanup and remediation activities, this estimate includes subsurface monitoring and surveillance of the sites for up to 100 years (DIRS 107294-DOE 1998).

The Department is continuing environmental restoration at the Nevada Test Site and is studying and monitoring groundwater contamination of the underground test areas. No long-term plans for remediating the underground test areas have been developed, and the wide range of costs, technical issues, and health and safety considerations in the report cited by the commenter make it premature to project an impact on the region from these activities.

10 (13452)

Comment - EIS010296 / 0038

On page 3-7, it is noted that the range of water demand for lower-temperature operations, combined with ongoing NTS [Nevada Test Site] water demand would be slightly below the lowest estimate of sustained yield for the hydrographic area (western two thirds of the Jackass Flats Groundwater basin, see p. 4-29 of the Draft EIS), but the addition of an aging facility could lead to water use of 100 percent of the lowest estimated perennial yield. It would be as low as 16 percent of the maximum estimated perennial yield. Buqo (1999) notes on p. 14 that "Localized water-level declines and changes in flow directions in the vicinity of DOE water supply wells has occurred and will continue to occur in proportion to the level of water needed to support the Test Site Operations. Overdraft has historically occurred on the NTS in the Yucca Flat hydrographic basin because of its perennial yield (700 acre feet per year). Future DOE water withdrawals on the NTS are not expected to exceed the perennial yields of any of the source basins." The estimates of perennial yield are exactly that - estimates. The estimated use might greatly exceed actual perennial yield.

Response

The Department used estimates of perennial yield that were prepared by the Nevada State Engineer. The Department recognizes that these are estimates, but they represent the best estimates available.

10 (13527)

Comment - EIS010392 / 0010

In light, of the effects on transportation, the cumulative impacts analysis should be re-evaluated. As it is now, the cumulative impacts analysis is not sufficient.

Response

The design evaluated in the Supplement to the Draft EIS (the flexible design) does not substantially affect the results of the cumulative-impacts evaluation described in Chapter 8 of the Draft EIS. The basic elements of the Proposed Action described in the Draft EIS are identical to the Proposed Action described in the Supplement; that is, to construct, operate and monitor, and eventually close, a geologic repository at Yucca Mountain. Because the design enhancements described in the Supplement had little effect on other elements of the repository program, the scope of the Supplement was limited to a discussion of the new design and its associated impacts. The transport of spent nuclear fuel and high-level radioactive waste to the repository would not be affected by the repository design described in the Supplement or how this design might evolve further. The amount of waste that could be transported to the repository is fixed. Therefore, the impacts of waste transport to the repository, including cumulative impacts, were not evaluated in the Supplement. In Chapter 6 of the Final EIS, DOE has modified and updated several analyses related to the transport of spent nuclear fuel and high-level radioactive waste to Yucca Mountain in response to public comments. Many of these changes are based on updated population data, and projections of future populations, near possible transport routes.

REFERENCES

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|--------|----------------------------|--|
| 146592 | Black and Townsend
1998 | Black, S. C. and Townsend, Y. E., eds. 1998. <i>Nevada Test Site, Annual Site Environmental Report for Calendar Year – 1997</i> . DOE/NV/11718-231. Las Vegas, Nevada: U.S. Department of Energy, Nevada Operations Office. TIC: 242871. |
|--------|----------------------------|--|

103099	Buqo 1999	Buqo, T. S. 1999. <i>Nye County Perspective: Potential Impacts Associated With the Long-Term Presence of a Nuclear Repository at Yucca Mountain, Nye County, Nevada</i> . Pahrump, Nevada: Nye County Nuclear Waste Repository Office. TIC: 244065.
103162	CEQ 1997	CEQ (Council on Environmental Quality) 1997. <i>Considering Cumulative Effects Under the National Environmental Policy Act</i> . Washington, D.C.: Council on Environmental Quality. TIC: 243482.
102030	CRWM M&O 1999	CRWMS M&O (Civilian Radioactive Waste Management System Management & Operating Contractor) 1999. <i>Waste Package Final Update to EIS Engineering File</i> . BBA000000-01717-5705-00019 REV 01. Las Vegas, Nevada: CRWMS M&O. ACC: MOL.19990330.0530.
100131	D'Agnese et al. 1997	D'Agnese, F. A.; Faunt, C. C.; Turner, A. K.; and Hill, M. C. 1997. <i>Hydrogeologic Evaluation and Numerical Simulation of the Death Valley Regional Ground-Water Flow System, Nevada and California</i> . Water-Resources Investigations Report 96-4300. Denver, Colorado: U.S. Geological Survey. ACC: MOL.19980306.0253.
101802	DOE 1995	DOE (U.S. Department of Energy) 1995. <i>Department of Energy Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Final Environmental Impact Statement</i> . DOE/EIS-0203-F. Idaho Falls, Idaho: U.S. Department of Energy, Idaho Operations Office. TIC: 216020.
101811	DOE 1996	DOE (U.S. Department of Energy) 1996. <i>Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada</i> . DOE/EIS 0243. Las Vegas, Nevada: U.S. Department of Energy, Nevada Operations Office. TIC: 239895.
103214	DOE 1996	DOE (U.S. Department of Energy) 1996. <i>Tank Waste Remediation System, Hanford Site, Richland, Washington, Final Environmental Impact Statement</i> . DOE/EIS-0189. Richland, Washington: U.S. Department of Energy. TIC: 226909.
103218	DOE 1996	DOE (U.S. Department of Energy) 1996. <i>Final Environmental Impact Statement for the Continued Operation of the Pantex Plant and Associated Storage of Nuclear Weapon Components</i> . DOE/EIS-0225. Three volumes. Washington, D.C.: U.S. Department of Energy. TIC: 242979.
101816	DOE 1997	DOE (U.S. Department of Energy) 1997. <i>Final Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste</i> . DOE/EIS-0200-F. Summary and five volumes. Washington, D.C.: U.S. Department of Energy, Office of Environmental Management. TIC: 232988.
101779	DOE 1998	DOE (U.S. Department of Energy) 1998. <i>Viability Assessment of a Repository at Yucca Mountain</i> . DOE/RW-0508. Overview and five volumes. Washington, D.C.: U.S. Department of Energy, Office of Civilian Radioactive Waste Management. ACC: MOL.19981007.0027; MOL.19981007.0028; MOL.19981007.0029; MOL.19981007.0030; MOL.19981007.0031; MOL.19981007.0032.

107294	DOE 1998	DOE (U.S. Department of Energy) 1998. <i>Accelerating Cleanup: Paths to Closure, Nevada Operations Office</i> . Las Vegas, Nevada: U.S. Department of Energy, Nevada Operations Office. TIC: 245784.
154121	DOI 2000	DOI (U.S. Department of the Interior) 2000. <i>Final Legislative Environmental Impact Statement, Timbisha Shoshone Homeland</i> . Three volumes. San Francisco, California: U.S. Department of the Interior, Timbisha Shoshone Tribe.
101075	ICRP 1977	ICRP (International Commission on Radiological Protection) 1977. "Recommendations of the International Commission on Radiological Protection." Volume 1, No. 3 of Annals of the ICRP. ICRP Publication 26. Reprinted 1982. New York, New York: Pergamon Press. TIC: 221568.
101836	ICRP 1991	ICRP (International Commission on Radiological Protection) 1991. "1990 Recommendations of the International Commission on Radiological Protection." Volume 21, No. 1-3 of Annals of the ICRP. ICRP Publication 60. New York, New York: Pergamon Press. TIC: 235864
152469	Institute of Medicine and National Research Council 1999	Institute of Medicine and National Research Council 1999. <i>Exposure of the American People to Iodine-131 from Nevada Nuclear-Bomb Tests. Review of the National Cancer Institute Report and Public Health Implications</i> . Washington, D.C.: National Academy Press. TIC: 248692.
152579	Montague 2000	Montague, K. 2000. "Facility Inventory." Email from K. Montague to P. Davis (CRWMS M&O), July 27, 2000. ACC: MOL.20001019.0131.
100018	National Research Council 1995	National Research Council 1995. <i>Technical Bases for Yucca Mountain Standards</i> . Washington, D.C.: National Academy Press. TIC: 217588.
101858	NCRP 1995	NCRP (National Council on Radiation Protection and Measurements) 1995. <i>Principles and Application of Collective Dose in Radiation Protection</i> . NCRP Report No. 121. Bethesda, Maryland: National Council on Radiation Protection and Measurements. TIC: 225254.
101899	NRC 1996	NRC (U.S. Nuclear Regulatory Commission) 1996. <i>Generic Environmental Impact Statement for License Renewal of Nuclear Plants</i> , Main Report, Final Report. NUREG-1437, Vol. 1. Washington, D.C.: U.S. Nuclear Regulatory Commission. TIC: 233963.
153277	SAIC 1991	SAIC (Science Application International Corporation) 1991. <i>Special Nevada Report</i> , September 23, 1991. Las Vegas, Nevada: Science Application International Corporation. ACC: NNA.19920131.0361.
103472	USAF 1999	USAF (U.S. Air Force) 1999. <i>Renewal of the Nellis Air Force Range Land Withdrawal: Legislative Environmental Impact Statement</i> . Washington, D.C.: U.S. Department of the Air Force. TIC: 243264.
103273	Walck 1996	Walck, M.C 1996. <i>Summary of Ground Motion Prediction Results for Nevada Test Site Underground Nuclear Explosions Related to the Yucca Mountain Project</i> . SAND95-1938. Albuquerque, New Mexico: Sandia National Laboratories. ACC: MOL.19970102.0001.

104630	YMP 1997	<p>YMP (Yucca Mountain Site Characterization Project) 1997. <i>Summary of Public Scoping Comments Related to the Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada.</i> Las Vegas, Nevada: Yucca Mountain Site Characterization Office. ACC: MOL.19970731.0515.</p>
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